

# DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

## NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

Kingspan Insulated Panels, Inc. 720 Marion Road Columbus, OH 42307

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

#### **DESCRIPTION:** Designwall 2000 Series Insulated Steel Wall Panel System

APPROVAL DOCUMENT: Engineering Report No. 14-139DW2000Series, titled "Designwall 2000 Series Wall Panel System", sheets 1 through 18 of 18, dated 11/10/2009, with revision 4 dated 05/15/2014, prepared by C-Buck Engineering, signed and sealed by James L. Buckner, P.E., bearing the Miami-Dade County Product Control renewal stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

#### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, Columbus, OH or Modesto, CA, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA renews NOA # 09-0713.01 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.

MIAMI-DADE COUNTY

107/31/2014

NOA No. 14-0317.05 Expiration Date: May 20, 2019 Approval Date: August 7, 2014 Page 1

### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### A. DRAWINGS

1. Engineering Report No. 14-139DW2000Series, titled "Designwall 2000 Series Wall Panel System", sheets 1 through 18 of 18, dated 11/10/2009, with revision 4 dated 05/15/2014, prepared by C-Buck Engineering, signed and sealed by James L. Buckner, P.E.

#### B. TESTS "Submitted under NOA # 09-0312.09"

- 1. Test reports on 1) Large Missile Impact Test per FBC, TAS 201-94
  2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  along with marked-up drawings and installation diagram of Designwall 2000 Insulated Exterior Wall Panels, prepared by Farabaugh Engineering and Testing, Inc., Test Report No. T101-08, dated 01/04/2008, signed and sealed by Daniel G. Farabaugh, P.E.
- 2. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with marked-up drawings and installation diagram of Designwall 2000 Insulated Exterior Wall Panels, prepared by Farabaugh Engineering and Testing, Inc., Test Report No. **T208-08**, dated 06/25/2008, signed and sealed by Daniel G. Farabaugh,
- 3. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
  2) Tensile Test per ASTM E8
  along with marked-up drawings and installation diagram of Designwall 2000 Insulated Exterior Wall Panels, prepared by Farabaugh Engineering and Testing, Inc., Test Report No. T227-08, dated 07/25/2008, signed and sealed by Daniel G. Farabaugh, P.E.

### C. CALCULATIONS "Submitted under NOA # 09-0312.09"

1. Engineering analysis and calculations, prepared by C-Buck Engineering, dated 03/06/2009, signed and sealed by James L. Buckner, P.E.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 14-0317.05

Expiration Date: May 20, 2019 Approval Date: August 7, 2014

#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

#### E. MATERIAL CERTIFICATIONS "Submitted under NOA # 09-0312.09"

1. Test report on Ignition Properties per ASTM D1929 and Surface Burning Characteristics per ASTM E84 of Designwall 2000 Insulated Panels, prepared by FM Approvals, Project ID 3024743, dated 06/12/2006, signed by R. P. Ferron, P.E.

#### F. STATEMENTS

1. Engineering Report No. 14-139DW2000Series statement of code conformance to 2010 FBC issued by C-Buck Engineering, dated 11/10/2009, with revision 4 dated 05/15/2014, signed and sealed by James L. Buckner, P.E.

#### "Submitted under NOA # 09-0312.09"

2. Statement letter of no financial interest issued by C-Buck Engineering, dated 09/25/2008, signed and sealed by James L. Buckner, P.E.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 14-0317.05 Expiration Date: May 20, 2019 Approval Date: August 7, 2014

## **Engineering Report & Drawings**

of

# Kingspan Insulated Panels, Inc. dba Kingspan Benchmark Designwall 2000 Series Wall Panel System

**Wall Assembly** 

for

## **Miami-Dade Notice of Acceptance**

Category:

**Panels** 

Sub - Category:

Wall

Product:

Designwall 2000 Series Wall Panel System

Face & Liner Material:

Steel

Core Material:

Foam

Panel Thickness:

2 in. & 3 in.

### Prepared by:

## James L. Buckner, P.E., SECB

Florida Professional Engineer # 31242 Project Manager: Youry Demosthenes Report No.: 14-139DW2000Series

Date: 11 / 10 / 09 Revised Date (4): 5/15/14

### Contents:

Cover Page	Page 1
Product Details	Page 2
Performance	Page 3-4
Installation	Page 5
Limitations and Identification	Page 5
Reference Data	Page 5
Material Specs and Component sizes	Page 6-7
Panel Drawings & Details	Page 8-18

PRODUCT RENEWED
as complying with the Florida
Building Code

Acceptance No A

By Missel Dade Product Control

TITLE: ENGINEERING REPORT

JAMES L. BUCKNER, P.E. FLORIDA P.E. #31242 CBUCK Engineering

CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927 MANUFACTURER:

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark 720 Marion Road Columbus, Ohio 43207 DATE: 11/10/09

PAGE #: 1 OF 18

PROJECT #: 14-139

DRAWN BY: YD

REVISIONS: 4 (5/15/14)

#### 1.0 Product:

1.1 Manufacturer:

Kingspan Insulated Panels, Inc. dba Kingspan Benchmark

1.2 Product Name:

Designwall 4000 Series Wall Panel System

1.3 Category:

**Panels** 

1.4 Subcategory:

Wall

#### 2.0 Evaluation Scope:

#### 2.1 Evaluation Criteria:

- 2.1.1 Florida Building Code (FBC) 2010
- 2.1.2 Code Section: High Velocity Hurricane Zone (HVHZ)
- 2.1.3 Miami-Dade Product Control Section Checklist #250

#### 2.2 Properties Evaluated:

- 2.2.1 Wind Resistance Properties
  - 2.2.1.1 Air Infiltration
  - 2.2.1.2 Uniform Static Air Pressure
  - 2.2.1.3 Water Resistance
  - 2.2.1.4 Large Missile Impact
  - 2.2.1.5 Cyclic Wind Pressure
- 2.2.2 Fire and Flame Properties
  - 2.2.2.1 Flame Spread Index
  - 2.2.2.2 Smoke Developed Index
  - 2.2.2.3 Spontaneous Ignition Temperature
  - 2.2.2.4 Flash Ignition Temperature

#### 2.3 Limits of Evaluation:

This product is limited to compliance with the criteria in section 2.1 and properties in section 2.2 of this report.

#### 3.0 Evaluated Uses:

Designwall 4000 Series panels are steel face and foam core used as nonbearing exterior wall panels.

#### 4.0 Assembly Description:

#### 4.1 General:

The Designwall 4000 Series panel systems are factory assembled sandwich panels with metal facings and a foam plastic core. These panels are applied horizontally. The panels have a tongue in groove interlocking edge. The panels are anchored to supports with clips and screws.

#### 4.2 Panel Dimensions:

4.2.1 Length:

1 ft. - 30 ft.

4.2.2 Width:

24 in. & 30 in.

4.2.3 Thickness:

2 in. & 3 in.

#### 5.0 Support:

The Support assembly is designed by others and shall have the following minimum Characteristics:

5.1 Type:

Vertical Studs

5.2 Material:

Steel

5.3 Thickness:

16 Ga. (0.062 in)

5.4 Spacing:

30 in. o.c. OR 18 in. o.c. (Refer to Performance Section 6.0 of this Report)

TITLE: ENGINEERING REPORT

CBUCK Engineering

JAMES L. BUCKNER, P.E. FLORIDA P.E. #31242

LORIDA P.E. #3124

CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403

(561) 491-9927

MANUFACTURER:

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark

720 Marion Road Columbus, Ohio 43207 DATE: 11/10/09

PRODUCT RENEWED

as complying with the Florida

Mismi Dade Product Control

PAGE #: 2 OF 18 PROJECT #: 14-139

DRAWN BY: YD

#### 6.0 Performance:

### 6.1 Panel Module 24 in. Wide x 2 in to 3 in Thick

6.1.1 Wind Resistance:

Design Pressure

Positive

+ 77 psf

Negative

- 77 psf

Based on:

a) Vertical Studs spaced 16 in. o.c.

b) Clip located at each horizontal joint at each vertical stud

6.1.2 Air Infiltration:

Standard

**TAS 202** 

Results:

Passed

6.1.3 Water Infiltration:

Standard:

**TAS 202** 

Results:

**Passed** 

6.1.4 Impact Rating:

Large Missile Impact:

Standard:

**TAS 201** 

Results

Passed

6.1.5 Fire Classification:

Standard:

**ASTM D1929** 

Required

Tested (Avg.)

Self Ignition Temperature

> 650° F

896° F

Standard:

ASTM E 84

Required

Tested (Avg.)

Flame Spread Index:

Smoke Developed Index:

< 75 < 450 25 130

....

PRODUCT RENEWED
as correpting with the Florida
Building Code
Acceptance No 14-0317.05

Mismi Dade Product Control

TITLE: ENGINEERING REPORT

CBUCK Engineering

AMES L. BUCKNER, P.E FLORIDA P.E. #31242

FLORIDA P.E. #31242 5/20/14 CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4

W. Palm Beach, FL 33403 (561) 491-9927

MANUFACTURER:

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark

720 Marion Road Columbus, Ohio 43207 DATE: 11/10/09
PAGE #: 3 OF 18

PROJECT #: 14-139
DRAWN BY: YD

#### 6.2 Panel Module 30 in. Wide x 2 in to 3 in Thick

6.2.1 Wind Resistance:

**Design Pressure** 

**Positive** 

+ 56 psf

Negative

- 56 psf

Based on:

a) Vertical Studs spaced 16 in. o.c.

b) Clip located at each horizontal joint at each vertical stud

6.2.2 Air Infiltration:

Standard

**TAS 202** 

Results:

**Passed** 

6.2.3 Water Infiltration:

Standard:

**TAS 202** 

Results:

**Passed** 

6.2.4 **Impact Rating:** 

Large Missile Impact:

Standard:

**TAS 201** 

Results

Passed

6.2.5 Fire Classification:

Standard:

**ASTM D1929** 

Required

Tested (Avg.)

Self Ignition Temperature:

> 650° F

896° F

Standard:

ASTM E 84

Required

Tested (Avg.)

Flame Spread Index:

< 75

25

Smoke Developed Index:

< 450

130

PRODUCT RENEWED as complying with the Florida Building Code

hade Product Coutrol

TITLE: ENGINEERING REPORT

CBUCK Engineering

CBUCK, Inc. COA#8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403

(561) 491-9927

MANUFACTURER:

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark

720 Marion Road Columbus, Ohio 43207 DATE: 11/10/09

PAGE #: 4 OF 18

PROJECT #: 14-139

DRAWN BY: YD

#### 7.0 Installation:

Each panel shall be fastened at the horizontal joints to the vertical supports with one concealed fastening clip #8100-4200 (per section 12.3) and one #14 fastener (per section 12.9).

All fasteners shall penetrate the steel support by ¾ in minimum.

Refer to Drawings on pages 8 through 18 of this report for supplemental installation guide.

#### 8.0 Limitations of Use:

- 8.1 The panel supports shall be 16 gauge minimum.
- 8.2 Maximum support spacing shall not be exceeded.
- 8.3 The panels shall be supported by structural framing members complying with the Miami-Dade (Florida High velocity zone) code.
- 8.4 Panel shall not be used as axial load bearing components and shall not be intended / designed to act as a diaphragm.
- 8.5 The engineer or architect of record shall verify that the supporting structure is capable of resisting the superimposed loads from the wall panel system and that the supporting structure is capable of providing lateral stability to carry the wind loads to the building foundation.

#### 9.0 Code Compliance

9.1 Product meets the High Velocity Hurricane Zone (HVHZ) Requirements of the Florida Building Code (FBC) 2010 for the properties evaluated.

#### 10.0 identification:

10.1 Each Panel shall bear a permanent label with the manufacturer's name or logo, manufacturing plant's city, state and the statement reading "Miami-Dade County Product Control Approved" is to be located on each panel.

#### 11.0 Reference Data:

11.1TAS 201 & 203, Large Missile Impact Test & Cyclic Wind Pressure Loading, respectively

For: Designwall 2000, Panel Module 24 in. By: Farabaugh Engineering and Testing, Inc.

Report No.: T101-08 Dated: 1/4/08

11.2 TAS 202, Air Infiltration Test, Uniform Static Air Pressure Test & Water Resistant Test.

For: Designwall 2000, Panel Module 24 in. By: Farabaugh Engineering and Testing, Inc. Report No.: T227-08 Dated: 7/25/08

11.3 TAS 201, 202 & 203, Large Missile Impact Test, Air Infiltration Test, Uniform Static Air Pressure Test & Water Resistant Test. & Cyclic Wind Pressure Loading, respectively.

For: Designwall 2000, Panel Module 30 in. By: Farabaugh Engineering and Testing, Inc. Report No.: T208-08 Dated: 6/25/08

11.4 ASTM D1929 & ASTM E 84, Self-Ignition Temperature & Flame Spread Index /Smoke Density PRODUCT RENEWED

For: Designwall 2000, 3" Thick Panel

By: Factory Mutual

Project ID.: 3024743 Dated: 6/12/06

PRODUCT RENEWED as complying with the Florida Building Code

Expiration Page

Mismi Dade Product Coutrol

TITLE: ENGINEERING REPORT

JAMES L. BUCKNER, P.E FLORIDA P.E. #31242 S/ZO/14 CBUCK Engineering

CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927 MANUFACTURER:

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark 720 Marion Road Columbus, Ohio 43207 DATE: 11/10/09 PAGE #: 5 OF 18

PROJECT #: 14-139
DRAWN BY: YD

#### 12.0 Product Components:

#### 12.1 Panel Core

The Core is a Laminated Polyisocyanurate rigid foam insulation

12.1.1 Density of Foam:

2.0 pcf

#### 12.2 Panel Face and Liner:

The panel has a steel face and liner. The panel faces and liners are available in various finishes.

12.2.1 Material

Steel

12.2.2 Yield Strength:

33 ksi

12.2.3 Corrosion Resistance:

Galvanized G90 or Galvalume

12.2.4 Material Standard:

ASTM A653 or ASTM A792 respectively

12.2.5 Thickness:

22 Gauge

#### 12.3 Concealed Fastening Clip:

This is the standard clip used between panels to secure the panel to the steel support

12.3.1 Part Number:

8100.4200

12.3.2 Material:

Steel

12.3.3 Thickness:

16 Gauge

12.3.4 Yield Strength:

150 ksi

12.3.5 Corrosion Resistance:

Zinc Plated

#### 12.4 Starter Clip:

This is the standard clip used to secure the base of the bottom panel to the steel support

12.4.1 Part Number:

8100.1000

12.4.2 Material:

Steel

12.4.3 Thickness:

12 Gauge

12.4.4 Yield Strength:

33 ksi

12.4.5 Corrosion Resistance:

Zinc Plated

#### 12.5 Back-Up Plate:

This is the standard plate used over the base flashing to cover the gap at the vertical joints.

12.5.1 Material:

Steel

12.5.2 Thickness:

24 Gauge

12.5.3 Yield Strength:

33 ksi

12.5.4 Corrosion Resistance:

Galvanized G90

#### 12.6 Base Flashing:

This is the standard flashing used for anchoring the bottom end wall panels to the supports.

12.6.1 Material:

Steel

12.6.2 Thickness:

22 Gauge

12.6.3 Yield Strength:

33 ksi

12.6.4 Corrosion Resistance:

Galvanized G90

ss complying with the Florida **Building Code** 

PRODUCT RENEWED

Mismi Dade Product Control

TITLE: ENGINEERING REPORT

CBUCK Engineering COA #8064 CBUCK, Inc.

1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403

(561) 491-9927

MANUFACTURER:

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark

720 Marion Road Columbus, Ohio 43207

11/10/09 DATE: PAGE #: 6 OF 18

PROJECT #: 14-139

DRAWN BY: YD

#### 12.7 Interlock Joint Gasket:

This is a gasket that weather seals the horizontal interlock joint of the panels.

12.7.1 Manufacturer:

**Advanced Elastomer Systems** 

12.7.2 Part Number:

9320,2000

12.7.3 Material:

Santoprene Thermoplastic Rubber

#### 12.8 Vertical Joint Gasket (VJ-1) Optional:

This is a gasket that finishes the appearance of the vertical butt joints of the panels.

12.8.1 Manufacturer:

**Advanced Elastomer Systems** 

12.8.2 Part Number:

9700.2100

12.8.3 Material:

Santoprene Thermoplastic Rubber

#### 12.9 Fasteners:

12.9.1 Manufacturer:

Atlas Bolt and Screw Company

12.9.2 Part Number:

14995

12.9.3 Type:

**Self Tapping** 

12.9.4 Size:

 $#14 - 10 \times 2 - 1/2$ 

12.9.5 Head:

Hex head

12.9.6 Corrosion Resistance:

Zinc Plated

#### 12.10 Sealant:

Non-Skinning Butyl Sealant is used for primary rear seal of the panel.

12.10.1 Manufacturer:

Tremco

12.10.2 Product:

JS-773

PRODUCT RENEWED ss complying with the Florida Building Code Acceptance No

Missri Dade Product Control

TITLE: ENGINEERING REPORT

CBUCK Engineering

COA #8064 CBUCK, Inc. 1399 N. Killian Dr., Ste 4

W. Palm Beach, FL 33403 (561) 491-9927

MANUFACTURER:

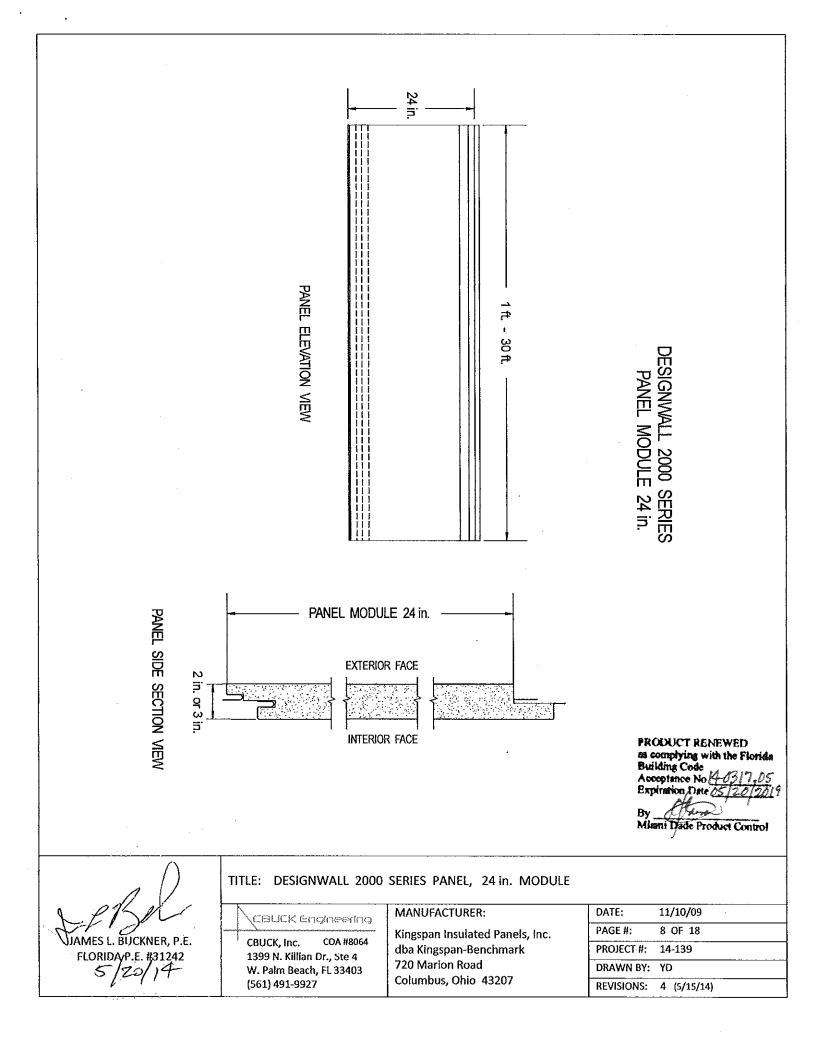
Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark

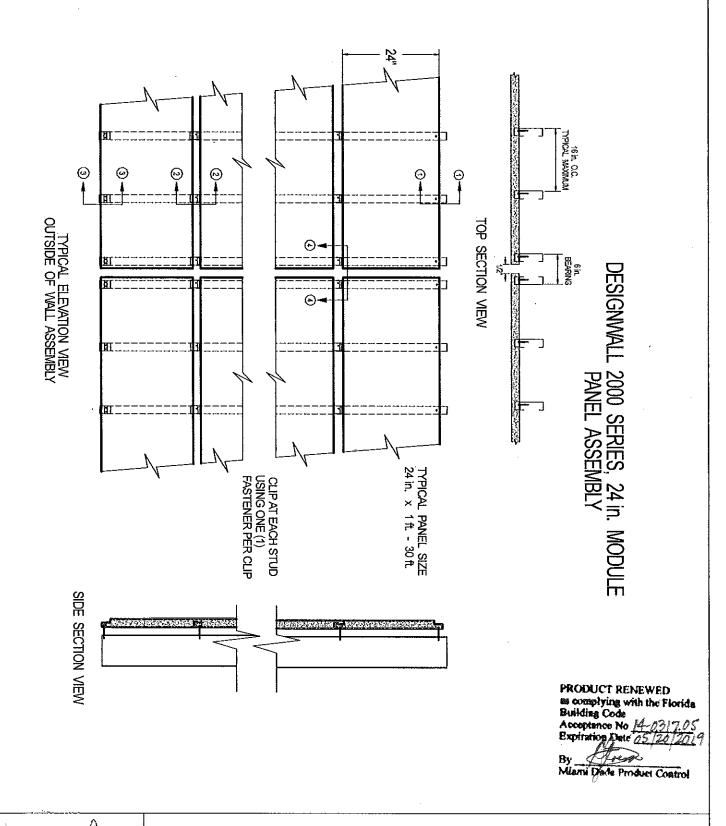
720 Marion Road Columbus, Ohio 43207

11/10/09 DATE:

PAGE #: 7 OF 18

PROJECT #: 14-139 DRAWN BY: YD





JAMES L. BUCKNER, P.E.
FLORIDA P.E. #31242
5/20/17

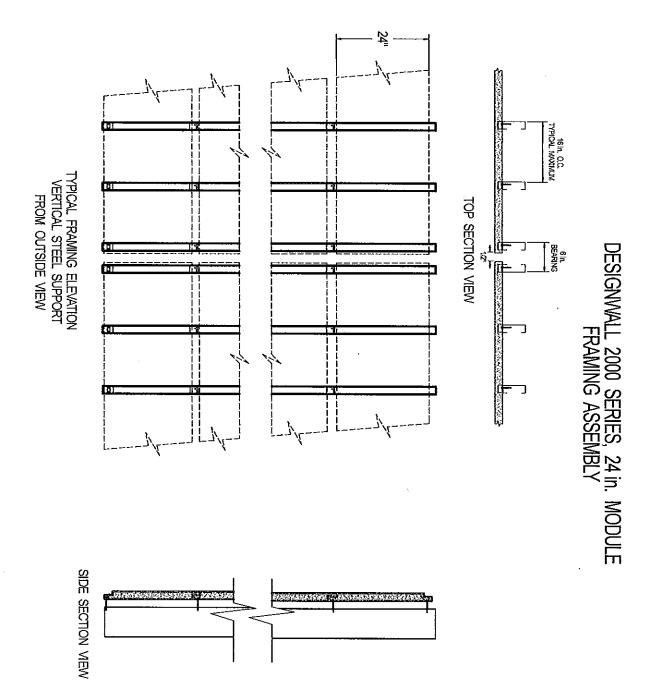
TITLE: DESIGNWALL 2000, 24 in. MODULE, PANEL ASSEMBLY

CBLCK Engineering

CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927 MANUFACTURER:

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark 720 Marion Road Columbus, Ohio 43207 DATE: 11/10/09 PAGE #: 9 OF 18

PROJECT #: 14-139
DRAWN BY: YD



PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 4-0317.05

Mizmi Dade Product Control

TITLE: DESIGNWALL 2000, 24 in. MODULE, FRAMING ASSEMBLY

JAMES L. BUCKNER, P.E, FLORIDA 9.E. #31242 5/20/19 CBUCK, inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927

CAUCIK Engineering

MANUFACTURER: Kingspan Insulated Panels, Inc.

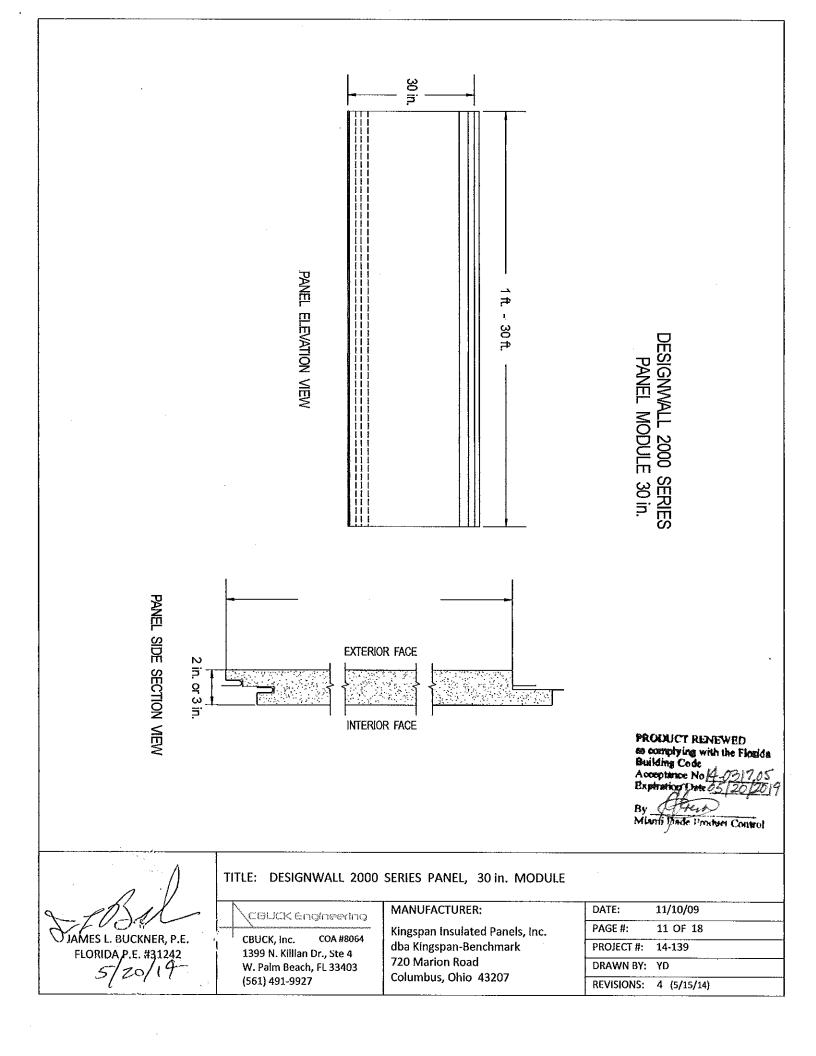
Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark 720 Marion Road Columbus, Ohio 43207 DATE: 11/10/09

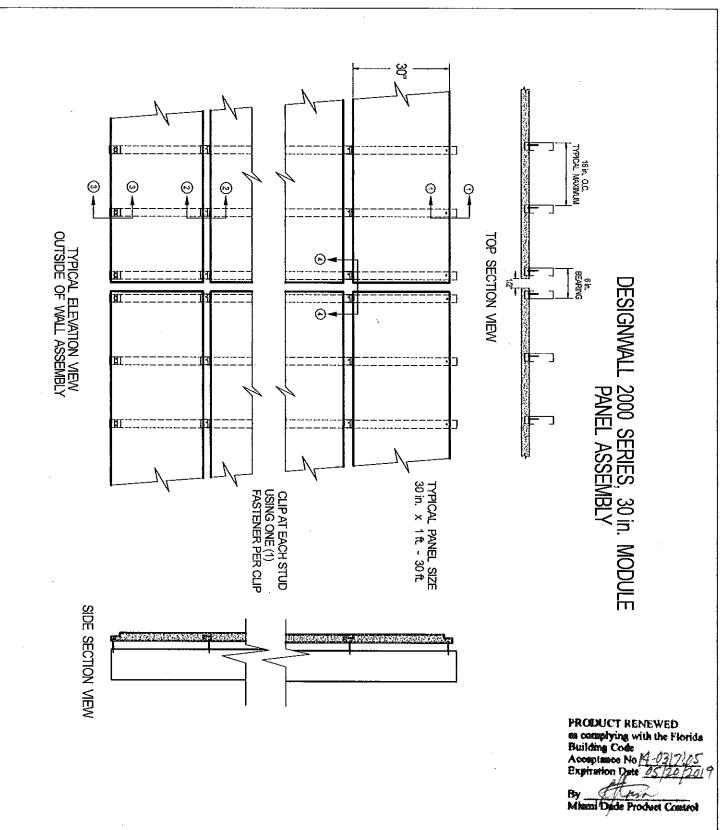
PAGE #: 10 OF 18

PROJECT #: 14-139

DRAWN BY: YD

REVISIONS: 4 (5/15/14)





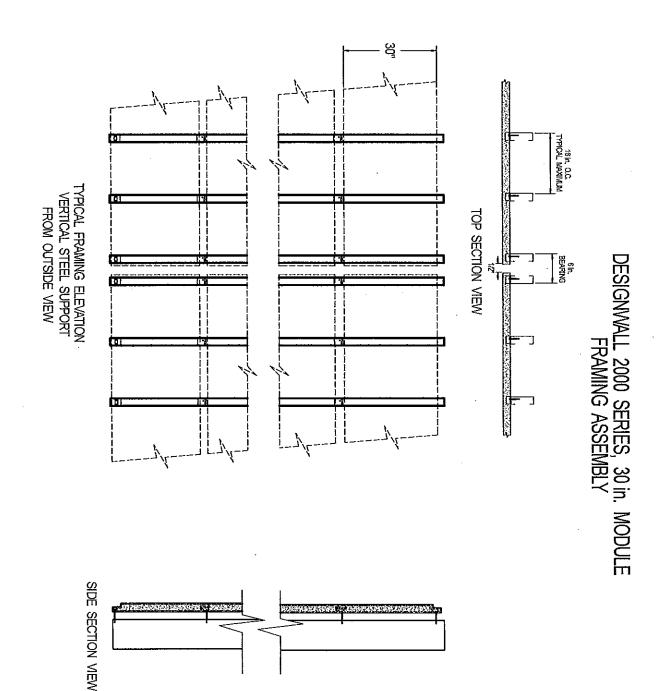
JAMES L. BUCKNER, P.E. FLORIDA, P.E. #31242 5/20/14 TITLE: DESIGNWALL 2000, 30 in. MODULE, PANEL ASSEMBLY

/CBUCK Engineering

CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927 MANUFACTURER:

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark 720 Marion Road Columbus, Ohio 43207 DATE: 11/10/09 PAGE #: 12 OF 18

PROJECT #: 14-139 DRAWN BY: YD



PRODUCT RENEWED

so complying with the Florida

Building Code

Acceptance No 14-2317.05

Missoi Dade Produm Control

TITLE: DESIGNWALL 2000, 30 in. MODULE, FRAMING ASSEMBLY

JAMES L. BUCKNER, P.E. FLORIDA P.E. #31242 5-/20/14 CBUCK Engineering
CBUCK, Inc. COA #8064
1399 N. Killian Dr., Ste 4

1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927 MANUFACTURER:

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark 720 Marion Road Columbus, Ohio 43207 DATE: 11/10/09

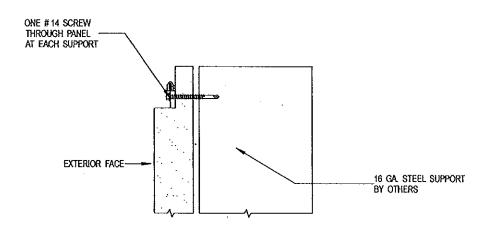
PAGE #: 13 OF 18

PROJECT #: 14-139

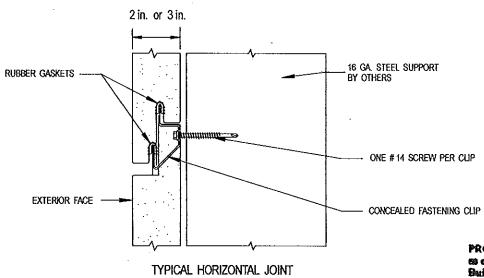
DRAWN BY: YD

REVISIONS: 4 (5/15/14)

# STRUCTURAL ATTACHMENT DETAILS FOR BOTH 24 in. & 30 in. PANEL MODULE



# TYPICAL TOP OF WALL PANEL DETAIL 1



DETAIL 2

PRODUCT RENEWED
ess complying with the Florida
Building Code
Acceptance No 14-03/7.05
Expiration, Diete 05/24/74

By Missel Date Product Control

J

TITLE: STRUCTURAL ATTACHMENT DETAILS FOR BOTH 24 in. & 30 in. PANEL MODULE

JAMES L. BUCKNER, P.E. FLORIDA P.E. #31242

CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927

CBUCK Engineering

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark 720 Marion Road Columbus, Ohio 43207

MANUFACTURER:

DATE: 11/10/09

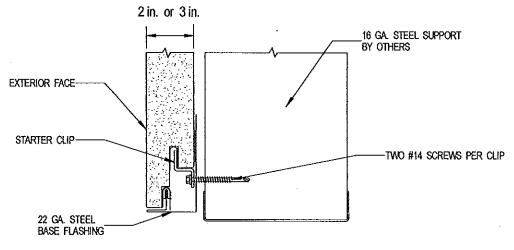
PAGE #: 14 OF 18

PROJECT #: 14-139

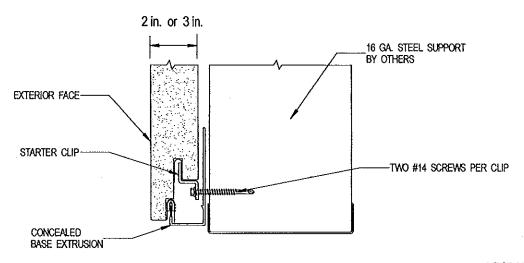
DRAWN BY: YD

REVISIONS: 4 (5/15/14)

# STRUCTURAL ATTACHMENT DETAILS FOR BOTH 24 in. & 30 in. PANEL MODULE



TYPICAL BASE OF WALL PANEL DETAIL 3



OPTIONAL BASE CONDITION OF WALL PANEL WITH BASE EXTRUSION

PRODUCT RENEWED as complying with the Florida Building Code
Acceptance No. 14-0317.05

By Ares

Miami Dade Product Control

Expiration Date 05/20

TITLE: SWISSPEARL FAÇADE SYSTEM WINDOW JAMB DETAIL

JAMES L. BUCKNER, P.E. FLORIDA P.E. #31242 5/20/14

CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927

CBUCK Engineering

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark 720 Marion Road Columbus, Ohio 43207

MANUFACTURER:

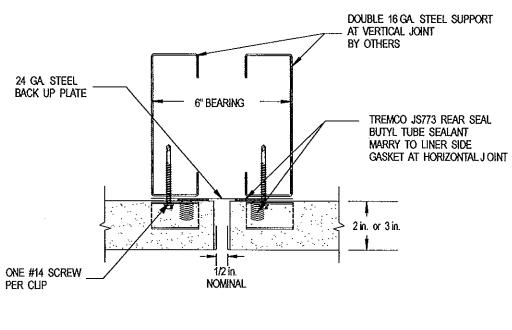
DATE: 11/10/09

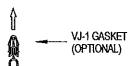
PAGE #: 15 OF 18

PROJECT #: 14-139

DRAWN BY: YD

# STRUCTURAL ATTACHMENT DETAILS FOR BOTH 24 in. & 30 in. PANEL MODULE





TYPICAL VERTICAL JOINT DETAIL 4

PRODUCT RENEWED
as complying with the Florids
Building Code
Acceptance No 14-0317.05

Miansi Dade Product Control

TITLE: STRUCTURAL ATTACHMENT DETAILS FOR BOTH 24 in. & 30 in. PANEL MODULE

JAMES L. BUCKNER, P.E. FLORIDAP.E. #31242

CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927

CBUCK Engineering

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark 720 Marion Road Columbus, Ohio 43207

MANUFACTURER:

DATE: 11/10/09

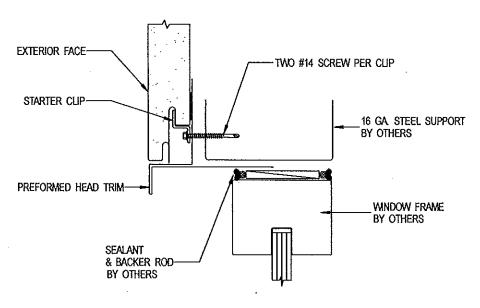
PAGE #: 16 OF 18

PROJECT #: 14-139

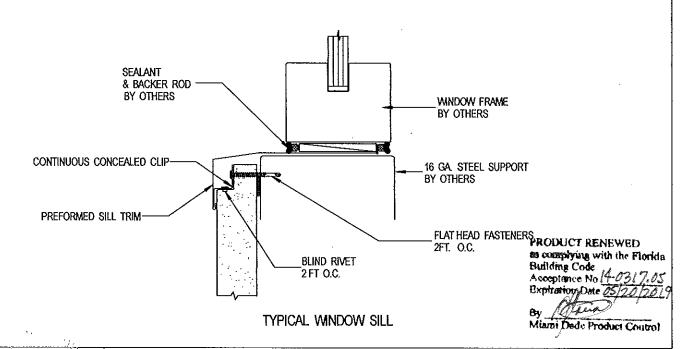
DRAWN BY: YD

REVISIONS: 4 (5/15/14)

# TYPICAL WINDOW DETAILS FOR BOTH 24 in. & 30 in. PANEL MODULE



TYPICAL WINDOW HEAD



JAMES L, BUCKNER, P.E. FLORIDA P.E. #31242. TITLE: TYPICAL WINDOW DETAILS FOR BOTH 24 in. & 30 in. PANEL MODULE

CBUCK Engineering

CBUCK, Inc. COA #8064

1399 N. Killian Dr., Ste 4

W. Palm Beach, FL 33403

(561) 491-9927

MANUFACTURER:
Kingspan Insulated Panels, Inc.
dba Kingspan-Benchmark
720 Marion Road
Columbus, Ohio 43207

DATE: 11/10/09

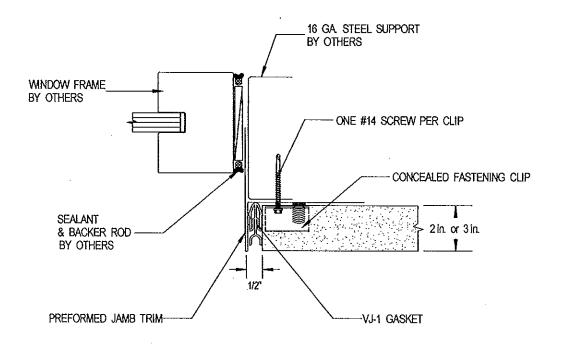
PAGE #: 17 OF 18

PROJECT #: 14-139

DRAWN BY: YD

REVISIONS: 4 (5/15/14)

# TYPICAL WINDOW DETAILS FOR BOTH 24 in. & 30 in. PANEL MODULE



TYPICAL WINDOW JAMB

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 4-23/7.05

Ru Stance

Mismi Dade Product Courn)

TITLE: TYPICAL WINDOW DETAILS FOR BOTH 24 in. & 30 in. PANEL MODULE

MANUFACTURER:

JAMES L. BUCKNER, P.E. FLORIDA P.E. #31242 CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, Fl. 33403 (561) 491-9927

CBUCK Engineering

Kingspan Insulated Panels, Inc. dba Kingspan-Benchmark 720 Marion Road Columbus, Ohio 43207 DATE: 11/10/09

PAGE #: 18 OF 18

PROJECT #: 14-139

DRAWN BY: YD

REVISIONS: 4 (5/15/14)